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Printed with State Funds

The Kentucky Women's Cancer Screening Program

Annual Report on the Status of Breast Cancer in the Commonwealth Fiscal Year 2006

Presented to the Governor
and State Legislature

By

Kentucky Women's Cancer Screening Program
Division of Women's Physical and Mental Health
Department for Public Health
Cabinet for Health and Family Services

Kentucky
UNBRIDLED SPIRIT

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Elaine Eustis, MD
Kentucky Commission on Women

APPENDIX E

List of Figures, Maps, and Tables

The Kentucky Women's Cancer Screening Program Annual Report on the Status of Breast Cancer in the Commonwealth Fiscal Year 2006

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The Kentucky Women's Cancer Screening Program
Division of Women's Physical and Mental Health
Kentucky Department for Public Health

in collaboration with

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Kentucky Cancer Registry
Louisville and Jefferson County Partnership in Cancer Control

Funding for this project was provided through KRS 214.554 and a Cooperative Agreement (U55/CCU421882-04) with the Centers for Disease Control and Prevention, Division of Cancer Control and Prevention.

Please direct requests for additional information to:
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Kentucky Women's Cancer Screening Program
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Glossary

Age-Adjusted: A weighted average of the age-specific or crude rates, where weights are the proportions of persons in the corresponding age groups of a standard million population.

Benign: A condition that is not cancerous.

Biopsy: Taking a small amount of tissue for microscopic analysis to establish a precise diagnosis.

Breast Carcinoma, In Situ: An early form of breast cancer characterized by absence of invasion of surrounding breast tissues, with no spreading of cancer cells beyond the milk ducts or milk-producing glands.

Breast Carcinoma, Invasive: A form of breast cancer characterized by the invasion of surrounding breast tissue, with spreading of cancer cells beyond the milk ducts or milk glands.

Incidence: Rate of new cancers of a specific site/type occurring in a specified population during a year, expressed as the number of cancers per 100,000 people.

Malignant: The medical term for cancer, referring to the abnormal division of cells which can spread through the body.

Mammogram: A form of breast x-ray used to detect breast cancer.

Mammogram, Screening: Two x-ray views of each breast, typically used when a physical exam shows no signs or symptoms of breast cancer are present.

Mammogram, Diagnostic: Three x-ray views of one or both breasts, typically used when a physical exam or screening mammogram shows signs or symptoms of breast cancer are present.

Payer: Agency responsible for paying for services performed through Local Health Departments; includes The Kentucky Women's Cancer Screening Program, Medicaid, Medicare, commercial insurance, and the client herself (self-paid).

Prevalence: Total number of people with a specific site/type of cancer at a particular moment in time in the entire population.

Ultrasound, Breast: An imaging procedure using high-frequency sound waves to create an image of a change in breast tissue.

APPENDIX C

References

1. American Cancer Society (ACS). Overview: Breast Cancer. How many women get breast cancer. Accessed August 15, 2007, at: http://www.cancer.org/docroot/CRI/content/CRI_2_2_1X_How_many_people_get_breast_cancer_5.asp?sitearea=.
2. American Cancer Society (ACS). Estimated cancer deaths for selected cancer sites by state, US, 2006. Accessed August 15, 2007, at: http://www.cancer.org/downloads/stt/CAFF06EsMcSt.pdf.
3. Breast and Cervical Cancer Treatment Act, 2000. Accessed August 15 2006, at: http://www.cdc.gov/cancer/nbccedp/law106-354.htm.
4. Centers for Disease Control and Prevention (CDC). Kentucky Behavioral Risk Factor Surveillance System Survey Data. Frankfort, Kentucky: Kentucky Department of Public Health and Centers for Disease Control and Prevention, 2006.
5. Kentucky Cancer Registry (KCR). Accessed August 15, 2007, at: http://www.kcr.uky.edu/.
6. Kentucky Department for Public Health, Cancer Resource Management Reports 1998-2006.
7. Kentucky Department for Public Health, Division of Administration and Financial Management Kentucky Women's Cancer Screening Program Billing Services File (EOB report dated September 22, 2006).
8. Kentucky Department for Public Health Practice Reference, Cancer Screening Follow-up Sections, revisions July 1, 2006.
9. Kentucky State Data Center. Accessed August 20, 2007, at: http://ksdc.louisville.edu/1census.htm.
10. Kentucky Women's Cancer Screening Program, Minimum Data Elements Reports, 2006.
11. National Cancer Institute (NCI). State Cancer Profiles. Accessed July 25, 2007, at: http://statecancerprofiles.cancer.gov/cgi-bin/quickprofiles/profile.pl?00&055.
12. Shell R, Tudiver F. Barriers to cancer screening by rural appalachian primary care providers. The Journal of Rural Health 2004; 20: 368-373.
13. Surveillance, Epidemiology, and End Results (SEER) Program. Software: Surveillance Research Program, National Cancer Institute SEER*Stat software (www.seer.cancer.gov/seerstat) Data: Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov) SEER*Stat Database: Mortality - All COD, Total U.S. (1969-2004) - Linked To County Attributes - Total U.S., 1969-2004 Counties, National Cancer Institute, DCCPS.
14. U.S. Food and Drug Administration, Center for Devices and Radiologic Health, Mammography; Accessed September 12, 2007, at: http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfMQSA/mqsa.cfm.

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My fellow Kentuckians:

Breast Cancer awareness, early detection and screening are vital issues that will make a difference in the lives of Kentucky families. According to the 2004 Kentucky Annual Vital Statistics Report, the percentage of breast cancer deaths (14 percent) is second only to lung cancer deaths (32 percent) as a cause of cancer death among Kentucky women.

The rate of diagnosis for new cases of breast cancer is on the rise. This can be attributed to an increase in early detection. The good news is, thanks to early detection and new innovative treatments, deaths from breast cancer are steadily decreasing.

The Report of Breast Cancer Screening for Fiscal Year 2006 demonstrates the results of tremendous efforts of the Kentucky Women's Cancer Screening Program (KWCSP) of the Kentucky Department for Public Health and its partners to provide breast cancer screening services and prompt referral for treatment to eligible women in the commonwealth.

The Report of Breast Cancer Screening for Fiscal Year 2006 exemplifies the work of local health departments to provide quality screening and diagnostic services and prompt referral for treatment services to our women in need of the preventive health services.

Sincerely,

Glenna Fletcher

First Lady Glenna Fletcher

CABINET FOR HEALTH AND FAMILY SERVICES
Department for Public Health
Office of the Commissioner

Ernie Fletcher
Governor

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Mark D. Birdwhistell
Secretary

The Kentucky Women's Cancer Screening Program (KWCSP) in collaboration with the Breast Cancer Advisory Committee is pleased to share with you the Fiscal Year 2006 Annual Report on the Status of Breast Cancer in the Commonwealth. This report provides an overview of the KWCSP and the Breast Cancer Research and Education Trust Fund, as well as a summary of the KWCSP achievements during Fiscal Year 2006.

This report details the burden of breast cancer among women in Kentucky. Kentucky women are diagnosed with breast cancer at a lower rate than women in the U.S., but they are dying at the same rate of breast cancer compared to the rest of the nation. Kentucky ranks twentieth in the nation in terms of annual breast cancer death rates. In 2006, the American Cancer Society estimated Kentucky women would be diagnosed with 3,220 new cases of breast cancer and 600 women would die each year from breast cancer.

To reduce the burden of breast cancer, the KWCSP was established in the Kentucky Department for Public Health in 1990. The KWCSP provides a vital service and a crucial component in the improvement of the status of women's health in the Commonwealth. The program's mission is to provide breast cancer screening services of high quality and at a low or reduced cost to women who may not otherwise receive breast cancer screening services. In fact, Kentucky was recognized as only one of 12 state programs in the nation that met all of the core performance indicators on the quality of breast and cervical cancer services assessed by the Centers for Disease Control and Prevention (CDC).

During FY 2006, the KWCSP provided breast cancer screenings to 17,181 women and detected 286 invasive breast cancers. In response to the great need for breast cancer treatment services, National Breast and Cervical Cancer Treatment funds were made available in 2002 through the Kentucky Department for Medicaid Services for the KWCSP women who were diagnosed with breast cancer and needed treatment services. Since the inception of the treatment program, more than 1,600 KWCSP patients have received benefits of coverage for treatment through the Breast and Cervical Cancer Treatment Program.

I would like to extend my appreciation to communities and healthcare providers across the Commonwealth for their support in the promotion of breast cancer awareness, screening and prompt referral for treatment of the KWCSP women with breast cancer. Through screening, early detection, prompt referral and community outreach initiatives, we can make a tremendous difference in the health and lives of Kentucky's women.

Sincerely,

William D. Hacker, MD, FAAP, CPE
Commissioner
Department for Public Health

APPENDIX B

Technical Notes

Data in this report was obtained from multiple sources. All data reported is based on the latest year available and are subject to change due to reporting delays. Data for services received at Local Health Departments in all 120 Kentucky counties comes from Cancer Resource Management Reports and Minimum Data Elements (MDE) Reports. Encounter billing information is provided to the KWCSP electronically by all Local Health Departments. MDE reports include seventy data indicators required for reporting to the Centers for Disease Control and Prevention (CDC). The Minimum Data Elements are collected electronically through Local Health Departments to report information on eligible patients for breast and cervical cancer screening, diagnosis and case management services paid with federal grant funding provided by the CDC's National Breast and Cervical Cancer Early Detection Program (NBCCEDP).

Estimates for breast cancers detected through Local Health Departments come from mammogram records that were electronically matched to Kentucky Cancer Registry (KCR) records. There is a lag time of nine months between the date of diagnosis and the date that a cancer case is reported to the KCR. An additional period of 21 months may be incurred before all cancer diagnosis information for each case is reported to the KCR. Therefore, data for breast cancers detected in FY 2006 are preliminary. Lastly, some breast cancer cases may not have been reported to the KCR related to accessibility of diagnostic and treatment services in large urban centers located in contiguous states.

Incidence and survival data were obtained from the Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute (NCI), a nationally recognized source for cancer data. The SEER is considered the standard for quality among cancer registries around the world and collects cancer incidence and survival data from population-based cancer registries. In 2001, the SEER Program expanded coverage to include Kentucky. SEER data used for this report is from 2004.

Mortality data come from the Surveillance and Health Data Branch of the Kentucky Department for Public Health. These rates are for the year 2004 and rates are age-adjusted to the 2000 U.S. standard population.

Breast cancer screening estimates for Kentucky and U.S. women aged 40 and older who did not receive mammograms within the past two years according to nationally recommended guidelines come from the Kentucky Behavioral Risk Factor Surveillance System (BRFSS), courtesy of the Kentucky Department for Public Health and the CDC. The BRFSS is an annual telephone survey that assesses health behaviors and disease prevention practices among adults 18 years of age and older. BRFSS data used in this report are from the 2002, 2004 and 2006 survey.

Population data is obtained from two sources. Data for Kentucky women by race and age were retrieved from the Kentucky State Data Center. The Kentucky State Data Center and its 78-member affiliate network provides training and assistance to government agencies, the business community, university researchers, and other interested data users regarding the use of Census data for research, administration, planning, and decision making. The Kentucky State Data Center is a cooperative effort of the University of Louisville, the Commonwealth of Kentucky, and the U.S. Census Bureau. Data for the Kentucky population was obtained from the U.S. Census Bureau. The U.S. Census Bureau collects demographic, economic, community and other data about the American population.

3. Breast Cancer Research and Education Trust Fund

KRS 211.580 Breast Cancer Research and Education Trust Fund. (1) The breast cancer research and education trust fund is created as a separate revolving fund. The trust fund shall consist of funds collected from the income tax checkoff created under KRS 141.446 and any other proceeds from grants, contributions, appropriations, or other moneys made available for the purposes of the trust fund. (2) Trust fund amounts not expended at the close of a fiscal year shall not lapse but shall be carried forward to the next fiscal year. (3) Any interest earnings of the trust fund shall become a part of the trust fund and shall not lapse. (4) Trust fund moneys shall be used to support breast cancer research, education, treatment, screening, and awareness in Kentucky. Funds shall be distributed as directed by the Breast Cancer Research and Education Trust Fund Board established by KRS 211.585. (5) Moneys transferred to the trust fund pursuant to KRS 141.446 are hereby appropriated for the purposes set forth in KRS 211.580 to 211.590. **Effective:** June 20, 2005 **History:** Created 2005 Ky. Acts ch. 27, sec. 2, effective June 20, 2005.

KRS 211.590 Duties of Breast Cancer Research and Education Trust Fund Board. The Breast Cancer Research and Education Trust Fund Board created by KRS 211.585 shall: (1) Develop a written plan for the expenditure of trust funds made available under KRS 211.580. The initial plan shall be completed on or before October 1, 2005, and shall be updated on an annual basis on or before October 1 of each year thereafter. The plan shall, at a minimum, include the following: (a) A summary of existing breast cancer education, awareness, treatment, and screening programs provided to residents of Kentucky by type of program and by geographic area; (b) A needs assessment for the Commonwealth of Kentucky that identifies additional programs that are needed by program type and geographic area, with support for why the identified programs are needed; and (c) A prioritized list of programs and research projects that the board will address with funding available through the competitive grant program established under subsection (2) of this section; (2) Promulgate administrative regulations to establish a competitive grant program to provide funding to not-for-profit entities, educational institutions, and government agencies in Kentucky offering programs or services in the areas of breast cancer research, education, awareness, treatment, and screening. (a) The grant program shall give preference to programs proposing to serve the medically underserved population. (b) The grant program shall provide funding to projects and programs in accordance with the priorities established in the plan developed under subsection (1) of this section. (c) The administrative regulations shall, at a minimum: 1. Establish an application process and requirements; 2. Set forth program and outcome measurement requirements; 3. Establish an application review and award process; and 4. Provide monitoring, oversight, and reporting requirements for funded programs; (3) Promulgate administrative regulations necessary to carry out the provisions of KRS 211.580 to 211.590; and (4) Provide to the Governor and the Legislative Research Commission an annual report by October 1 of each year. The report shall include: (a) The plan developed under subsection (1) of this section for the expenditure of funds for the current and next fiscal year; (b) A summary of the use and impact of prior year funds; (c) A summary of the activities of the board during the prior fiscal year; and (d) Any recommendations for future initiatives or action regarding breast cancer research, education, awareness, treatment, and screening. **Effective:** June 20, 2005 **History:** Created 2005 Ky. Acts ch. 27, sec. 4, effective June 20, 2005.

Executive Summary

Breast cancer has been a long standing public health concern in Kentucky. Breast cancer kills approximately 600 women every year in Kentucky. As a response to reduce the burden of breast cancer in Kentucky, action steps taken by the Kentucky Women's Cancer Screening Program (KWCSP) in the Department for Public Health include early detection through breast cancer screening and diagnostic services, quality assurance, public education and outreach activities, and prompt referrals to treatment services.

In 1990, Kentucky state general funds were made available for breast cancer screening services administered by the Kentucky Department for Public Health through Local Health Departments. In 1995, the program applied for and received federal funding for additional breast cancer screening services. Since the 1990 inception of the KWCSP through FY 2006, 206,595 screening mammograms have been provided and 2,183 cases of breast cancer have been detected.

In FY 2006, at least 87,000 women received breast cancer screening services through Local Health Departments. Of those women, 17,181 women received screening mammograms. Through the KWCSP, more than 28,000 women received breast cancer screening services. Screening mammograms were performed on at least 12,000 of the 28,000 KWCSP eligible women.

Every effort has been made to assure the quality of screening and diagnostic services and prompt referrals to treatment services as evidenced by results of the August 2006 Centers for Disease Control and Prevention (CDC) report of the program's performance for eleven (11) core performance indicators. Four (4) of the program's core performance indicators assess quality of breast cancer services and seven (7) of the core performance indicators assess quality of cervical cancer services. The KWCSP met or exceeded 100% of the CDC standards for all eleven (11) core performance indicators for breast and cervical cancer services for the last three data submissions.

In Kentucky, there is a disparity in deaths due to invasive breast cancer. Annual invasive breast cancer deaths are higher in rural areas (26.3 deaths per 100,000 women) compared to those in urban areas (26 deaths per 100,000 women). Additionally, a racial disparity exists between the percent of invasive breast cancers found in the late stages among African American women (37%) compared to white women (30%). Moving forward, the KWCSP will continue to focus resources on activities to decrease the geographic and racial disparities in death rates due to invasive cancer.

The KWCSP made great strides in improving screening rates of the disparate populations through public education and outreach. KWCSP recruitment staff continued to work with state partners, Local Health Department staff, and 52 community coalitions to support efforts to recruit members of disparate populations. Through contracts with the Fayette County Health Department and the University of Louisville Brown Cancer Center, the program supported special efforts to recruit African American women and women from other disparate populations for breast cancer screenings.

Other special outreach projects include a national pilot project sponsored by the CDC. The state workgroup called TEAM UP implemented a media campaign pilot to promote awareness of the need for screening in nine contiguous eastern Kentucky counties with high mortality rates and low screening rates for breast cancer.

Breast and Cervical Cancer Treatment Funds, a resource with significant potential for the reduction of Kentucky's breast cancer death rates, became available for Kentucky women on October 1, 2002. The Kentucky Department for Medicaid Services (DMS) added coverage with special eligibility processes to enroll women who required treatment for breast or cervical cancer or precancerous conditions. Without the availability of screening, diagnostic and referrals for treatment services through KWCSP, 1,600 women might not have been diagnosed nor received treatment for breast or cervical cancer.

I. The Burden of Breast Cancer

Breast cancer is the most commonly diagnosed cancer among American women. The American Cancer Society estimates that 14%, or 1 in 8, American women born today will be diagnosed with cancer of the breast at some time during their lifetime. Cancer was responsible for deaths of nearly one out of every five Kentucky women. Breast cancer is the second leading cause of cancer deaths. (Refer to Figure 1.) Based on 2004 data from the National Cancer Institute, Kentucky was ranked as having the 20th highest breast cancer death rate (24.3 deaths per 100,000 women) in the nation. Breast cancer places a great financial toll on individuals and society alike. Breast cancer not only decreases the quality of life of the women it strikes, the disease also has a negative impact on the quality of life of affected family members and caregivers.

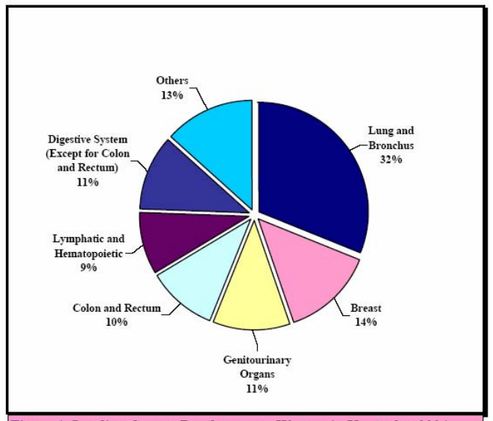


Figure 1. Leading Cancer Deaths among Women in Kentucky, 2004 (Source: Kentucky Annual Vital Statistics Report, Kentucky Department for Public Health).

A. Breast Cancer Incidence Rates

Breast cancer incidence, the rate of new cases of breast cancer in women during the year, in Kentucky has continued an overall downward trend over the last few years. This trend follows a similar decline in U.S. female invasive breast cancer incidence rates for the same period of time. According to the Surveillance, Epidemiology, and End Results (SEER) Program data of the National Cancer Institute for the years 1999-2003, Kentucky's invasive breast cancer incidence rate was lower than that of the rest of the nation. (Refer to Figure 2.) For this time period, the average annual age-adjusted female breast cancer (invasive) incidence rate in Kentucky was 125 cases per 100,000 women, lower than the U.S. rate of 131 cases per 100,000 women. The average annual age-adjusted invasive breast cancer incidence rate from 1999 to 2003 was 124 cases per 100,000 among white women and 132 per 100,000 among African American women, reflecting a higher incidence of breast cancer among African American women in Kentucky. This is comparable to the incidence rate of breast cancer in the U.S.

2. Breast and Cervical Cancer Treatment Program

907 KAR 1:805 Breast and cervical cancer eligibility for Medicaid. This administrative regulation establishes the requirements for the determination of Medicaid eligibility for low-income, uninsured women under the age of sixty-five (65) who have been identified by the Kentucky Women's Cancer Screening Program and are in need of treatment for breast or cervical cancer, including a precancerous condition and early stage cancer. (1) "Cabinet" means the Cabinet for Health and Family Services. (2) "CDC" means the federal Centers for Disease Control and Prevention. (3) "Creditable coverage" is defined in KRS 304.17A-005(7). (4) "Department" means the Department for Medicaid Services or its designated agent. (5) "Kentucky Women's Cancer Screening Program" means the program administered by the Department for Public Health which provides breast and cervical cancer screening and diagnostic services to low-income, uninsured or underinsured women using both state funds and monies from the Centers for Disease Control and Prevention's National Breast and Cervical Cancer Early Detection Program, including Title XV funds. (6) "Qualified alien" means an alien who, at the time the alien applies for or receives Medicaid, meets the requirements established in 907 KAR 1:011, Section 5(12)(a)1b or c. A woman shall be eligible for Medicaid benefits if she: (1) Has not attained the age of sixty-five (65); (2) Is a United States citizen or qualified alien; (3) Is a resident of Kentucky; (4) Is not an individual described in any of the mandatory Medicaid categorically-needy eligibility groups; (5) Is not a resident of a public institution in accordance with 907 KAR 1:011, Section 6; (6) Has been: a) Screened for breast or cervical cancer under the Kentucky Women's Cancer Screening Program; and (b) Found to need treatment for breast or cervical cancer, including a precancerous condition or early stage cancer; (7) Does not have creditable coverage unless the treatment of breast or cervical cancer is not: (a) A covered service; or (b) Covered due to: 1. Exclusion as a preexisting condition; 2. An HMO affiliation period; or 3. Exhaustion of a lifetime limit on benefits; and (8) Has provided a Social Security number in accordance with 907 KAR 1:011, Section 11. A woman who is determined to require routine monitoring services for a precancerous breast or cervical condition shall not be considered to need treatment. Medicaid eligibility may be effective three (3) months prior to the month of application. The length of Medicaid eligibility shall be as follows: (a) Four (4) months for the treatment of breast cancer; (b) Three (3) months for the treatment of cervical cancer; and (c) Two (2) months for the treatment of precancerous cervical or breast disorder. The department may grant an extension of eligibility if further treatment is necessary for breast or cervical cancer or a precancerous cervical or breast disorder. To request an extension, the treating provider shall complete a MAP-813D, Breast and Cervical Cancer Treatment Program Request for Extension of Eligibility, and submit it to the department. After receipt of the completed MAP-813D, the department shall notify the recipient of the eligibility extension period. If the age of sixty-five (65) is attained during an eligible period, Medicaid eligibility shall be terminated at the end of the birth month. A local health department shall: (1) In a joint effort with an applicant, complete a MAP-813B, BCCTP Eligibility Screening Form, to determine if the recipient is potentially eligible for Medicaid in another eligibility category; (2) Refer the applicant to the local Department for Community Based Services office if she is potentially eligible in another Medicaid group; (3) If the applicant is determined to meet the eligibility criteria established in Section 2 of this administrative regulation: a) In conjunction with the applicant, complete a MAP-813, Breast and Cervical Cancer Treatment Program Application; and b) Contact the department to obtain an authorization number; and (4) If an authorization number is received, provide the applicant's eligibility information to the department. The recipient shall be responsible for reporting to the department within ten (10) days a change in: (1) Breast or cervical cancer treatment status; (2) Creditable health insurance coverage; (3) Address; or (4) Another circumstance which may affect eligibility. An appeal regarding the Medicaid eligibility of an individual shall be conducted in accordance with 907 KAR 1:560. (2) If a woman is determined ineligible for the Kentucky Women's Cancer Screening Program, the appeal procedures shall be in accordance with 902 KAR 1:400.
Effective: August 20, 2003.

APPENDIX A

Kentucky Statutes and Administrative Regulations

1. Kentucky Women's Cancer Screening Program

KRS 214.550 Definitions for KRS 214.552 to 214.556. As used in KRS 214.552 to 214.556: (1) "Department" means the Department for Public Health of the Cabinet for Health and Family Services. (2) "Fund" means the breast cancer screening fund. (3) "Screening" means the conduct of screening mammography for the purpose of ascertaining the existence of any physiological abnormality, which might be indicative of the presence of disease. **Effective:** June 20, 2005 History**:** Amended 2005 Ky. Acts ch. 99, sec. 461, effective June 20, 2005. – Amended 1998 Ky. Acts ch. 426, sec. 408, effective July 15, 1998. – Amended 1994 Ky. Acts ch. 184, sec. 1, effective July 15, 1994. – Created 1990 Ky. Acts ch. 318, sec. 2, effective July 1, 1990.

KRS 214.554 Breast Cancer Screening Program – Breast Cancer Advisory Committee –Annual report. (1) There is established within the department a Breast Cancer Screening Program for the purposes of: (a) Reducing morbidity and mortality from breast cancer in women through early detection and treatment; and (b) Making breast cancer screening services of high quality and reasonable cost available to women of all income levels throughout the Commonwealth and to women whose economic circumstances or geographic location limits access to breast cancer screening facilities. (2) Services provided under the Breast Cancer Screening Program may be undertaken by private contract for services or operated by the department and may include the purchase, maintenance, and staffing of a truck, a van, or any other vehicle suitably equipped to perform breast cancer screening. The program may also provide referral services for the benefit of women for whom further examination or treatment is indicated by the breast cancer screening. (3) The department may adopt a schedule of income-based fees to be charged for the breast cancer screening. The schedule shall be determined to make screening available to the largest possible number of women throughout the Commonwealth. The department shall, where practical, collect any available insurance proceeds or other reimbursement payable on behalf of any recipient of a breast cancer screening under KRS 214.552 to 214.556 and may adjust the schedule of fees to reflect insurance contributions. All fees collected shall be credited to the fund. (4) The department may accept any grant or award of funds from the federal government or private sources for carrying out the provisions of KRS 214.552 to 214.556. (5) For the purpose of developing and monitoring the implementation of guidelines for access to and the quality of the services of the Breast Cancer Screening Program, there is hereby created a Breast Cancer Advisory Committee to the commissioner of the Department for Public Health which shall include the directors of the James Graham Brown Cancer Center and the Lucille Parker Markey Cancer Center, the director of the Kentucky Cancer Registry, the director of the Division of Women's Physical and Mental Health, one (1) radiologist with preference given to one who has been fellowship-trained in breast diagnostics and who shall be appointed by the Governor, one (1) representative of the Kentucky Office of Rural Health appointed by the Governor, one (1) representative of the Kentucky Commission on Women appointed by the Governor, and at least three (3) women who have had breast cancer and who shall be appointed by the Governor. (6) The commissioner of the Department for Public Health, in consultation with the Breast Cancer Advisory Committee, shall annually, but no later than November 1 of each year, make a report to the Governor, the Legislative Research Commission, and the Interim Joint Committees on Appropriations and Revenue and on Health and Welfare on the: (a) Implementation and outcome from the Breast Cancer Screening Program including, by geographic region, numbers of persons screened, numbers of cancers detected, referrals for treatment, and reductions in breast cancer morbidity and mortality; (b) Development of quality assurance guidelines, including timetables, for breast cancer screening under this section, and monitoring of the manner and effect of implementation of those guidelines; and (c) Funds appropriated, received, and spent for breast cancer control by fiscal year. **Effective:** June 20, 2005 **History:** Amended 2005 Ky. Acts ch. 99, sec. 462, effective June 20, 2005. – Amended 2003 Ky. Acts ch. 48, sec. 1, effective June 24, 2003. – Amended 1998 Ky. Acts ch. 95, sec. 1, effective July 15, 1998; and ch. 426, sec. 409, effective July 15, 1998. – Amended 1994 Ky. Acts ch. 184, sec. 2, effective July 15, 1994. – Created 1990 Ky. Acts ch. 318, sec. 4, effective July 1, 1990.

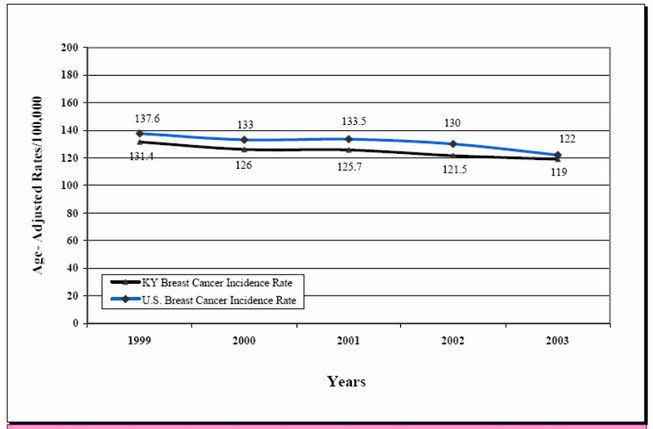
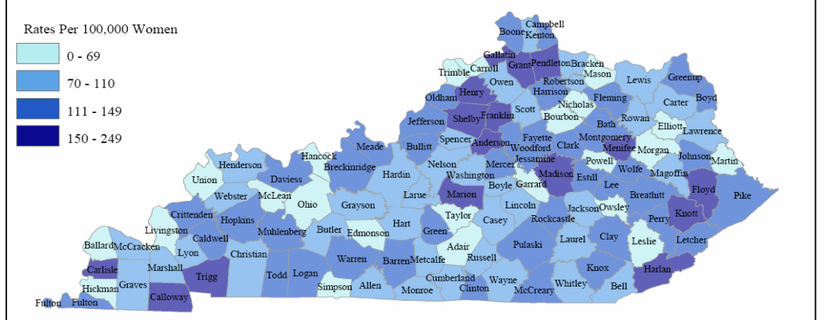


Figure 2. Female Invasive Breast Cancer Incidence Rates, Kentucky vs. U.S., 1999-2003 (Source: National Cancer Institute, 2007).

The most recent available data (2004) from the Kentucky Cancer Registry revealed five counties in Kentucky had more than twice the age-adjusted incidence rates due to invasive breast cancer compared to the state average age-adjusted rate (116.4/100,000 women). These counties were: Gallatin (249/100,000 women), Menifee (215/100,000 women), Floyd (182/100,000 women), Knott (176/100,000 women), and Harlan (178/100,000 women). (Refer to Map 1.) As with women in counties with higher rates of invasive breast cancer incidence, women in counties with higher rates of breast cancer mortality may have multiple risk factors for invasive breast cancer. National studies show higher risk factors associated with breast cancer such as health history, economic and environmental factors. On the other hand, higher incidence in these counties could represent effective outreach to recruit women for early detection of breast cancer and increased accessibility to breast cancer screening services. Trends in county screening rates are being monitored to assess these findings.

Map 1. Invasive Breast Cancer Incidence Rates by County, Kentucky, 2004



B. Breast Cancer Mortality Rates

Kentucky's average invasive breast cancer mortality rates among Kentucky women (27 deaths per 100,000 women) was slightly higher than the average mortality rate due to breast cancer among women in the United States (26 deaths per 100,000 women) from 1999 through 2003. (Refer to Figure 3). From 2000 through 2004, mortality rates of breast cancer in rural areas (26.3 deaths per 100,000 women) of Kentucky are slightly higher than in the urban areas (26.0 deaths per 100,000 women) of Kentucky. To decrease the number of deaths from breast cancer among Kentucky women, the KWCSP will continue to promote early detection and prompt referrals for treatment of breast cancer among all Kentucky women and support special outreach initiatives to decrease the geographic disparity in these mortality rates.

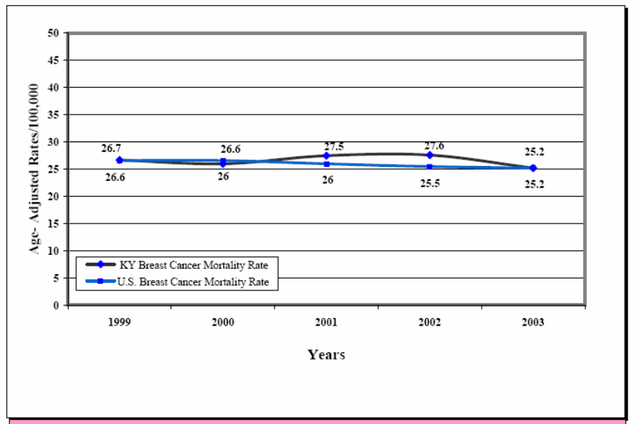


Figure 3. Female Invasive Breast Cancer Mortality Rates, Kentucky vs. U.S., 1999-2003 (Source: National Cancer Institute, 2007).

Female breast cancer mortality rates vary considerably across racial and ethnic groups in Kentucky as elsewhere in the United States. African American women continue to die of breast cancer at a higher rate than any other racial or ethnic group, suggesting racial and ethnic disparities exist in Kentucky and in the U.S. The average annual age-adjusted breast cancer mortality rate in Kentucky from 2002 to 2004 was 26 cases per 100,000 in white women and 37 cases per 100,000 African American women. The observed higher incidence and higher mortality among African American women may be the result of later detection of disease among African American women. In Kentucky, among African Americans 37% of invasive breast cancers were found in the late stages compared to 30% in white women from 2000 to 2004. African American women among the age group 40-49 years have higher death rate due to breast cancer (16.7%) compared to white women (10%) according to the Kentucky Cancer Registry. These findings indicate a need to continue on-going outreach initiatives to Kentucky's African American women to assure access to services and to promote early detection and prompt treatment after diagnosis.

Table 5 below indicates state, federal and local tax funds spent for breast cancer clinical services that include screening, diagnostic follow-up and case management for Fiscal Years 2003-2006. During these fiscal years, local tax appropriations funded a total of 33% of all breast cancer clinical services (screening, diagnostic follow-up and case management) through Local Health Departments in Kentucky.

Table 5. Expenditures of State, Federal and Local Tax Funds for Breast Cancer Screening, Follow-up and Case Management for Fiscal Years 2003-2006*

Fiscal Year	State	Federal	Local Tax	Total
2003	$1,045,319	$571,119	$513,912	$2,130,350
2004	$1,017,981	$552,818	$716,790	$2,287,589
2005	$984,000	$573,703	$927,714	$2,485,417
2006	$1,030,413	$646,407	$966,952	$2,643,772
Totals	$4,077,713**	$2,344,047	$3,125,368	$9,547,128

*Expenditures for Breast Cancer Screening, Follow-up and Case Management are based on a calculation of the distribution of breast cancer screening, follow-up and case management services (approximately 40% of all KWCSP clinical services encounters) in the FY 2006 KWCSP services billing file (report dated 9/22/06) and the Statement of Revenue and Expenses for Fiscal Year 2006. Beginning in Fiscal Year 2006, as a result of continued data and program management improvements, the numbers in the table reflect expenditures for services entered in the Public Health billing system by Local Health Departments in all 120 counties.

**State funds cover Breast Cancer Screening, Follow-up, and case management services that are not approved for payment with federal grant funds.

VI. Breast Cancer Research and Education Treatment Trust Fund

In accordance with KRS 211.580, the Breast Cancer Research and Education Trust Fund program was created in June, 2005. The purpose of the trust fund program is to distribute moneys to support breast cancer research, education, treatment, screening, and awareness in Kentucky. The trust fund consists of funds collected from the state income tax checkoff and any other proceeds from grants, contributions, appropriations, or other moneys made available for the purposes of the trust fund.

Trust fund moneys are allocated through a competitive grant process to provide funding to not-for-profit entities, educational institutions, and governmental agencies in Kentucky. Proposals are used to provide programs or services in the areas of breast cancer research, education, awareness, treatment, and screening. Preference for funding is given to entities whose programs will serve medically underserved populations. Trust fund money availability is advertised through a board-approved notification plan. A report of the trust fund program accomplishments is reported to the Governor and the Legislative Research Commission each year.

The Breast Cancer Research and Education Trust Fund program is located organizationally within the Department for Public Health, Division of Women's Physical and Mental Health (DWPMH). The Breast Cancer Research and Education Trust Fund Board administers the program with the assistance of DWPMH staff. (Refer to Appendix A.) Together, they assure that trust fund program moneys are used to support breast cancer research, education, awareness, treatment, and screening, thereby improving the health outcomes of Kentucky's women.

Table 4. Federal and State Funds Spent on Breast Cancer Screening and Follow-up for Fiscal Years 1991 through 2006

Fiscal Year	Breast Cancer Screening		Breast Cancer Follow-Up[2]	Training[3]	Outreach[3]	Total per Fiscal Year
	Visits[1]	Mammograms				
1990-91	$172,200	$92,200		$10,300		$274,700
1991-92	$260,900	$328,700	$14,500	$12,500		$616,600
1992-93	$341,700	$476,100	$102,600	$12,250	$104,000	$1,036,650
1993-94	$360,400	$558,400	$140,600	$20,200	$254,000	$1,333,600
1994-95	$336,800	$499,700	$128,100	$13,900	$110,950	$1,089,450
1995-96	$556,600	$516,000	$130,300	$11,550	$6,000	$1,220,450
1996-97	$549,700	$608,900	$191,574	$3,000	$117,602	$1,470,776
1997-98	$588,000	$870,200	$238,300	$42,600	$198,108	$1,937,208
1998-99	$642,200	$640,200	$317,500	$56,700	$236,853	$1,893,453
1999-00	$838,962	$619,920	$411,308	$31,360	$543,294	$2,444,844
2000-01	$718,395	$610,624	$423,669	$31,000	$359,702	$2,143,390
2001-02	$866,703	$633,640	$566,645	$43,500	$496,517	$2,607,005
2002-03	$436,438	$614,246	$565,754	$43,500	$496,517	$2,156,455
2003-04[4]	$424,116	$596,903	$549,780	$54,500	$456,517	$2,081,816
2004-05	$420,580	$591,927	$545,196	$54,500	$456,517	$2,068,720
2005-06[5]	$375,884[5]	$632,673[5]	$668,263[5]	$58,500	$382,249	$2,117,569
FY 1991-2006 Total	$7,889,578	$8,890,333	$4,944,089	$499,860	$4,218,826	$26,492,686

Source: Kentucky Department for Public Health, Division of Women's Physical and Mental Health, Cancer Resource Management File.

[1] The actual visits are a combination of breast cancer screening (education on breast self-examination and clinical breast exam) and other preventive measures. Actual proportion of the costs may vary since each visit is individualized to meet the patient's screening and other preventive services need. Of the total visit cost, 40% is allocated to breast cancer screening (second column from left). The figures reported for 2005-2006 screening, diagnostic and case management services are based on the KWCSP services billing file (report dated 9/22/06) and the Statement of Revenue and Expenses for Fiscal Year 2006.

[2] Includes funds for case management.

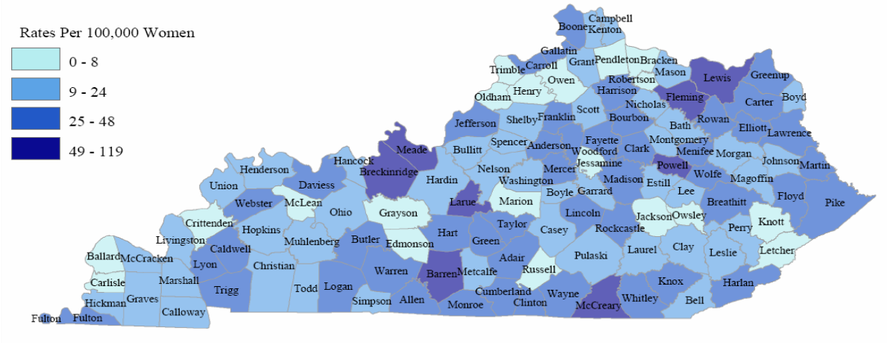
[3] For the purpose of this report, the expended funds in the table allocate 50% of the total training and outreach expenditures of state funds to breast cancer. The remaining 50% is allocated to cervical cancer training and outreach. In FY 95, 96, and 97, additional federal funds were spent on training and outreach that are not shown in this table. Expenditures shown for these three years were state funds only.

[4] Rates for reimbursements for 10 services were increased during FY04 to provide an incentive to community providers to contract with Local Health Departments to provide breast cancer screening services.

[5] Source of the denominator for the calculation of breast cancer screening, diagnostic follow-up and case management expenditures is the total program clinical services expenditures for each fiscal year included in the Statement of Revenue and Expenses for Fiscal Years 2003-2006. (Refer to State and Federal Columns in Table 4). Beginning in FY 2006, as a result of continued data and program management improvements, the numbers in the table reflect expenditures for services entered in the Public Health billing system by Local Health Departments in all 120 counties.

Given the small number of Hispanic women in the general Kentucky population (1.9% in 2006), available data for invasive breast cancer mortality among Hispanic women is not sufficient to support reliable inferences about mortality in this population. The KWCSP will continue to assess trends for invasive breast cancer mortality among this population and will work with community, state and national partners to support initiatives to promote early detection, diagnosis and prompt treatment of invasive breast cancer among all minority residents of the state.

Map 2. Invasive Breast Cancer Mortality Rates by County, Kentucky, 2004



Age-Adjusted to the 2000 U.S. Standard Million Population
Average Age-Adjusted Rate for KY : 24.4 cases per 100,000 women
Source: Kentucky Cancer Registry, 2004

The most recent, finalized data (2004) from the Kentucky Cancer Registry revealed eight counties in Kentucky had more than twice the age-adjusted mortality rates due to invasive breast cancer compared to the state average age-adjusted rates (24.4/100,000 women). These counties were: Breckinridge (58/100,000 women), Meade (65/100,000 women), Larue (53/100,000 women), Barren (64/100,000 women), McCreary (56/100,000 women), Powell (119/100,000 women), Fleming (58/100,000 women), and Lewis (50/100,000 women). However, the counts of deaths due to breast cancer among these counties are too small to calculate a stable age-adjusted rate. (Refer to Map 2.) Women in counties with higher rates of breast cancer mortality may have multiple risk factors for invasive breast cancer such as health history, economic and environmental factors. National studies suggest higher risk for breast cancer mortality in women with lower household income, less access to healthcare services for screening, diagnosis and treatment, decreased outreach encounters, and later detection of disease.

C. Summary

Overall as a state, Kentucky's breast cancer death rates have remained stable over the past five years and are similar to the breast cancer death rates in the nation. Breast cancer death rates vary across Kentucky counties with no apparent clustering of elevated rates in any one region of the state. Breast cancer incidence rates have steadily dropped over the last five years; Kentucky's breast cancer incidence rates, the rate of new cases of breast cancer in women during the year, have consistently remained below national figures, averaging 6.5% lower.

Even though breast cancer screening rates have remained consistent over the past five years, more cases of invasive breast cancer have been detected. Kentucky women aged 40 and older are receiving screening mammograms at a rate similar to the U.S. rate. Figure 4 shows the proportion of women aged 40 and older in Kentucky and in the U.S. who reported they had a mammogram in the past two years. From 2002 to 2006, Kentucky women who received screening mammograms in the past two years have remained fairly consistent and there is no significant difference compared to the national percentage for women aged 40 and older.

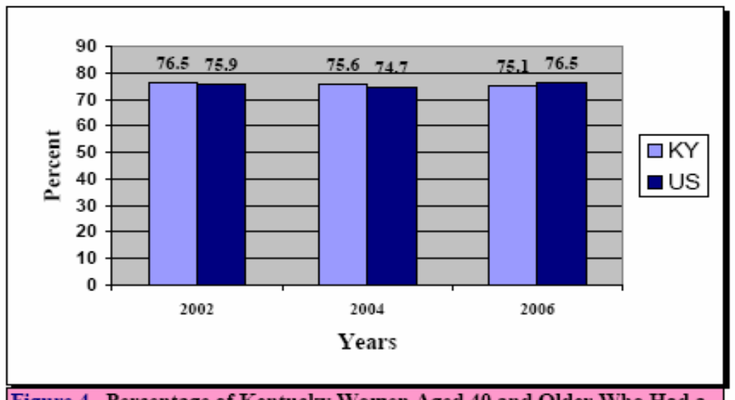


Figure 4. Percentage of Kentucky Women Aged 40 and Older Who Had a Mammogram Within the Past Two Years; Kentucky and U.S.; 2002, 2004 and 2006 (Source: Kentucky Behavioral Risk Factor Surveillance System Survey and Centers for Disease Prevention and Control, 2006).

In 2006, the BRFSS shows 24.9% of women aged 40 and older surveyed reported they had not had a mammogram in the past two years, the frequency established in the nationally recommended guidelines. However, over the life of the KWCSP, the screening mammography rate of rarely or never screened women has dramatically declined from 40.8% in 1994 to 24.9% in 2006. (Refer to Figure 5.) The trend since 2002 indicates that the proportion of women who have not received a mammogram in the past two years has remained consistent. This finding of the survey suggests that the KWCSP must continue outreach efforts to promote recommended screening intervals for early detection of breast cancer among Kentucky women and recruit rarely or never screened women as well as African American, Hispanic and Appalachian women. By fostering partnerships with not only public and private organizations but also professionals and breast cancer survivors, progress will be made.

Although changes to the data collection and reporting process have resulted in dramatic improvements in data timeliness and completeness for submission as required to the CDC, the program continues to address challenges in data management systems as identified via the program quality assurance monitoring. Quality assurance monitoring of Local Health Department performance is accomplished through analysis of data files and focused site visits to determine Local Health Department needs for technical assistance and program performance improvements. Ongoing assessment must be accomplished to assure completeness and accuracy of eligibility, clinical screening, and diagnostic service data, as well as quality of services and fiscal accountability.

V. Financial Progress

A. Funding Sources

The KWCSP is supported by state and federal funds for the provision of clinical services including diagnostic follow-up tests when abnormal screening test results are obtained. The remainder of the funds supports administrative and infrastructure such as state staff salaries, training programs for Local Health Department nurses and practitioners, and other program activities. Contracts with universities and memoranda of agreements with the Local Health Departments support cancer screening services, follow-up diagnostic tests, case management, local outreach projects, and community based staff. Many Local Health Departments supplement the funding for breast cancer screening services for women eligible for the program through local tax appropriations.

B. Financial Data (1991 – 2006)

Table 4 shows how funds were spent for the last sixteen state fiscal years. Note that the costs of mammograms shown in the table include mammograms paid for with state *and* federal funds. FY 1998 was the first year in which federal funds were used to pay for screening and follow-up services. As of October 1999, all 120 counties were eligible for federal funds for screening and diagnostic follow up.

The information in each column of the table summarizes the expenses paid by the program in each fiscal year for the following services/activities: breast cancer screening office visits; breast cancer screening mammograms; breast cancer follow-up visits (including diagnostic tests, procedures, case management); training; and outreach activities. The last column reflects the total of expenditures of these services/activities for each fiscal year. The average cost of screening services, including those who received diagnostic mammograms, was $130 per woman.

As a result of five Women's Health Update Conferences conducted, physicians and other healthcare professionals imparted knowledge regarding current breast cancer screening practice guidelines to 250 Local Health Department clinical staff. Through a contract with the Cumberland Valley District Health Department, the program provided instruction in clinical breast examination using the Mammacare® method to over 65 individuals.

Through a partnership with the University of Louisville Kentucky Cancer Program, the Kentucky Department for Public Health maintained support of the continuing education self-study kit (called "Providers Practice Prevention") for primary care physicians, advanced registered nurse practitioners, and physician assistants to increase the number of and improve the quality of routine breast cancer screenings for Kentucky women. For FY 2006, the University of Louisville Kentucky Cancer Program provided clinical breast examination instruction using live models to 220 medical residents in Kentucky.

In FY 2006, the University of Louisville Kentucky Cancer Program distributed 2,900 of the "Quick Reference Guide for Health Care Providers: Breast and Cervical Cancer Screening and Treatment in Kentucky". This guide promotes the KWCSP and the Breast and Cervical Cancer Treatment Program, which is administered by the Department for Medicaid Services (DMS). More than 9,000 copies of the Quick Reference guide have been distributed since its development to providers statewide and to other stakeholders through various outreach events.

B. Data Monitoring

The National Breast and Cervical Cancer Early Detection Program (NBCCEDP) requires the KWCSP to collect an expanded data set which includes seventy data elements. The Minimum Data Elements are reported twice yearly to the Centers for Disease Control and Prevention (CDC). The CDC shares feedback regarding the results of the reports with the program staff after each submission. The CDC reviews the program's data report to determine whether standards are met for NBCCEDP performance indicators. Continued quality assurance improvements have contributed to improvements in data management and in the collection and reporting of data for services provided by the KWCSP.

Throughout FY 2006, the program continued efforts to streamline the data collection and reporting system to assure NBCCEDP performance indicators were met. The KWCSP implemented data management tools to review vendor data files. These tools were used to assess, on a monthly basis, the completeness, accuracy, and timeliness of the data reported in the data management vendor's file. *As a result of this and other efforts, the KWCSP met sixty-seven of sixty-eight indicators and submitted 99.5% complete data to CDC in FY 2006.*

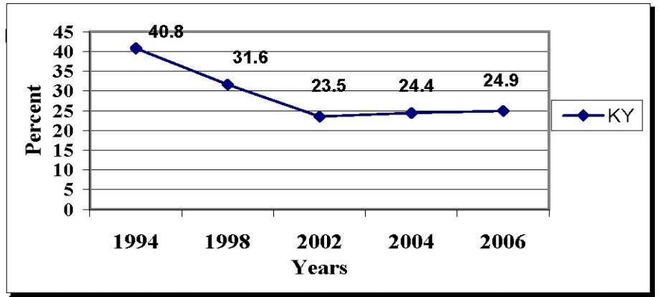


Figure 5. Percentage of Women Aged 40 and Older Who Have Not Had a Mammogram Within the Past Two Years, 1994-2006 (Source: Kentucky Behavioral Risk Factor Surveillance System Survey, 2006).

II. Program Overview

Breast cancer screening services are available through preventive health programs at the Local Health Departments in all of Kentucky's 120 counties. Women to be screened are seen initially in Local Health Departments by registered nurses or other practitioners who provide instruction in breast self-examination and perform clinical breast exams. In accordance with nationally recommended screening guidelines, annual clinical breast exams are provided for patients beginning at age 21 and annual screening mammograms are provided for patients beginning at age 40. Local Health Departments contract with local providers for screening mammograms and for follow-up diagnostic tests as clinically indicated.

Women in the KWCSP who receive abnormal breast cancer screening results are referred to providers who provide contracts through Local Health Departments to provide follow-up diagnostic services, which may include diagnostic mammography. The majority of diagnostic follow-up procedures are covered for women in the KWCSP who have abnormal mammogram results. For those services for which no funds are available, or for services not covered by third party payers, Local Health Departments negotiate with local providers to provide these services to patients at a minimal cost. For treatment for women with a final diagnosis of cancer or precancer of the breast, the KWCSP assists with enrolling and initiating necessary referrals to the Department for Medicaid Services Breast and Cervical Cancer Treatment Program.

Each year, the KWCSP supports a variety of activities aimed at raising awareness about breast cancer and the benefits of screening. Throughout FY 2006, the program collaborated with the Kentucky Cancer Program and other partners to conduct media campaigns, community and provider education programs, and to support outreach activities of local cancer coalitions across the state. These outreach and media campaigns focused on recruitment of Appalachian women, women aged 50 and older, and women who have never or rarely been screened for breast cancer. A woman who has rarely been screened for breast cancer is one who has not had a screening mammogram for two years or more according to the nationally recognized guidelines for frequency of breast cancer screening.

A. Eligibility Criteria

The KWCSP serves women who may not otherwise receive breast cancer screening services. These women include the following: Aged 21 to 64 years; household income of less than 250% of the federal poverty guidelines; and have no insurance, Medicare or Medicaid coverage. Women with household incomes below 100% of the poverty level receive services at a minimal cost. Women with household incomes between 100 and 250% of the poverty level are charged according to a sliding fee schedule. All women receive breast cancer screening services according to age. Women younger than 40 years of age receive clinical breast exams and screening mammography services if they have been previously diagnosed with breast cancer, have had chest wall radiation, or have a family history of pre-menopausal breast cancer. Women 40-64 years old receive clinical breast exams and annual mammograms. Women are never denied services due to an inability to pay. Women who do not meet eligibility criteria for services through the KWCSP may be referred to other programs for cancer screening services.

B. Provision of Services

Cancer screening services are provided by a physician, nurse practitioner, or a specially trained registered nurse at a Local Health Department or contracted healthcare provider. A cancer screening visit includes a health history; a physical examination including a Pap test; a pelvic exam; a clinical breast exam; laboratory tests; referral for annual mammogram for women ages 40 years old and older; and risk reduction counseling. Nurse case management is also provided for patient follow-up in the event of abnormal results. Patients are encouraged to receive all services; however, the patient retains the right to refuse any part of the exam.

Local Health Departments contract with local providers for mammograms and diagnostic tests. In counties where there is not a certified mammography facility or where an agreement cannot be established, a contract is established with a neighboring county or with a mobile mammography unit. There are approximately 162 mammography facilities available to provide mammograms for Local Health Department clients across the state. Technical assistance from KWCSP staff members is available to assist Local Health Departments identify providers for the potential establishment of contracts or to assist with funding to assure transportation for patients to their medical appointments.

A. Clinical Standards

Clinical guidelines, including timetables for screening, diagnostic follow-up, and case management, are established for the Local Health Departments through the Public Health Practice Reference (PHPR). The Public Health Practice Reference guidelines are updated biannually and reflect current nationally recognized research and best practices. This reference contains the standards by which services are evaluated through routine and focused quality assurance activities. The Public Health Practice Reference guidelines for breast cancer screening recommend that annual clinical breast exams are provided beginning at age 21 and annual screening mammograms are provided beginning at age 40 in accordance with nationally recommended screening guidelines. All women with an abnormal clinical breast examination, regardless of age, are referred for surgical consultation for further evaluation. The appropriate follow-up for abnormal results of mammograms is specified in the Public Health Practice Reference.

1. Case Management

The goal of case management is for all women enrolled in the Kentucky Women's Cancer Screening Program to receive accessible, timely and medically appropriate screening and diagnostic services, and referrals for treatment services. To assure these services, each Local Health Department is required to designate a Nurse Case Manager (NCM) to assure complete and timely tracking and follow-up for all women with abnormal screening and diagnostic results. The NCM employs a patient tracking system to assure that women receive timely notification and referrals to providers for abnormal screening and diagnostic results. Using a patient reminder tool, the NCM is responsible to assure patients receive case management services of reassessment at appropriate screening intervals. Additionally, the NCM is responsible for the development of an appropriate plan of care, coordination of patient care with providers, individualized patient counseling and education on test results and procedures, and ongoing review of the patient's plan of care to assure adherence to the current PHPR guidelines.

2. Professional Development

Throughout FY 2006, the KWCSP contracted with the University of Louisville to provide continuing education for Local Health Department nurses and practitioners regarding Women's Health education and cancer screening clinical skills and practices. More than 40 Local Health Department registered nurses received this essential training to assure that all women who receive breast cancer screenings through the Local Health Departments receive quality services. This two-day training focused on teaching breast self-exam, performing a clinical breast exam using the MammaCare® method, female pelvic anatomy, and performance of a thorough pelvic examination, correct Pap smear technique, and understanding abnormal Pap smear results. In addition to the hands-on training provided during the two-day course, the nurses completed the six-month preceptorship which included performing 25 women's cancer screening examinations under the direct supervision of a qualified medical preceptor. After successful completion of the preceptorship, the nurses received certification to document completion of the requirements to provide cancer screening services.

Table 3. Selected Core Performance Indicators for Breast Cancer for the Kentucky Women's Cancer Screening Program, FY 2006

Program Performance Indicator	CDC Standard	Kentucky Results		National Results	
		Percentage	Standard Met?	Percentage	Standard Met?
Abnormal Breast Cancer Screening Results with Complete Follow-up	≥ 90%	*91.0% (1,403/1,542)*	***YES***	93.3% (97,783/104,813)	YES
Abnormal Breast Cancer Screening Results; Time from Screening to Diagnosis > 60 Days	≤ 25%	*9.0% (127/1,404)*	***YES***	15.7% (15,385/97,888)	YES
Treatment Started for Breast Cancer	≥ 90%	*95.7% (44/46)*	***YES***	96.7% (4,520/4,672)	YES
Breast Cancer; Time from Diagnosis to Treatment > 60 days	≤ 20 %	*6.8% (3/44)*	***YES***	6.4% (289/4,508)	YES
Screening Mammograms Provided to Women > 50 years of age	≥ 75%	*100.0% (4,940/4,940)*	***YES***	*75.7% (294,031/388,208)*	***YES***

Clinical benchmarks, developed and implemented to standardize the quality assurance review process, correlate with standards established by the CDC's National Breast and Cervical Cancer Early Detection Program (NBCCEDP). The quality assurance review process was enhanced in FY 2006 to include targeted activities to identify opportunities for program improvement, identify Local Health Departments in need of further assessment or technical assistance, and to focus staff activity and resources to assure and, as needed, improve program performance.

In FY 2006, quality assurance activities included routine quality assurance site visits which were conducted twice a year at each cancer screening site throughout Kentucky. During each site visit, the state Case Management Coordinator (CMC) reviews the patient follow-up tracking system and external healthcare provider contracts. The CMC assesses Local Health Department compliance with federal and state program guidelines and policies as well as needs for training and technical assistance to assure the continuity of appropriate and timely quality care. The utilization of a standardized quality assurance tool during chart reviews assured that specific criteria and standards were being reviewed and consistently measured at each site. Any issues or concerns identified during the site visit are immediately addressed by the CMC with the Local Health Department. All findings are also communicated to the Local Health Department in writing within 14 days. If applicable, a written plan of correction is requested from the Local Health Department and a follow-up review is conducted by the CMC to assure appropriate actions are taken to resolve issues.

In addition, current protocols and practices are reviewed by the KWCSP Breast Cancer Medical Advisory Committee (BCMAC). Members of the BCMAC, including radiologists, surgeons, and clinical pathologists, provide clinical expertise and advice regarding current standards of care to promote quality services.

C. Public Education and Outreach

1. Coalitions

During FY 2006, collaborative efforts resulted in the implementation of media messages and support for outreach efforts in all 120 Local Health Departments and 52 community cancer coalitions for breast and cervical cancer. (Refer to Table 1.) These community coalitions implemented activities to increase awareness of the need for breast cancer screening, targeting women aged 50 and older as well as those who have never or rarely been screened for breast cancer. Women who have never or rarely been screened for breast cancer are at risk for late detection of breast cancer and consequently have higher mortality rates from breast cancer. The KWCSP helped plan and provided support for the following community coalition outreach initiatives to recruit women for screening for breast cancer: educational presentations, distribution of educational materials, health fairs, professional education and awareness through presentations and materials, newspaper and radio articles, press releases, and public service announcements (PSAs). During 2006, community coalition activities resulted in the screening of 2,468 women, the distribution of 10,472 pieces of educational material, and the provision of nearly 700 educational presentations, including 33 professional education and awareness presentations. Community collaborative efforts also reached 748,973 persons through media (i.e., radio, TV, PSAs, newspaper articles).

Table 1. Counties with Community Breast and Cervical Cancer Coalitions FY 2006

1. Ballard	27. McCreary
2. Bath	28. Madison
3. Bourbon	29. Magoffin
4. Bullitt	30. Marshall
5. Caldwell	31. Meade
6. Carlisle	32. Menifee
7. Carroll	33. Mercer
8. Christian	34. Monroe
9. Cumberland	35. Montgomery
10. Elliott	36. Morgan
11. Estill	37. Muhlenberg
12. Fayette	38. Nicholas
13. Fleming	39. Northern Kentucky
14. Floyd	40. Ohio
15. Franklin	41. Oldham
16. Graves	42. Owen
17. Green	43. Owsley
18. Harlan	44. Powell
19. Jessamine	45. Pulaski
20. Knott	46. Shelby
21. Lawrence	47. Todd
22. Lee	48. Warren
23. Leslie	49. Washington
24. Lewis	50. Wayne
25. Lincoln	51. Whitley
26. McCracken	52. Wolfe

2. TEAM UP

Since 2003, the KWCSP has participated in TEAM UP, a national partnership between the United States Department of Agriculture (USDA), the National Cancer Institute (NCI), the Centers for Disease Control and Prevention (CDC), and the American Cancer Society (ACS). The objective of TEAM UP is to increase breast cancer screening services among never or rarely screened women through grassroots awareness and activism. The project is aimed at nine rural Appalachian counties in Kentucky whose women have high mortality rates and low breast cancer screening rates (Breathitt, Elliott, Floyd, Johnson, Lawrence, Magoffin, Martin, Powell and Wolfe counties). As a baseline, age-adjusted mortality rates were calculated for these nine counties for 1998-2002.

To date, TEAM UP has accomplished the following activities:

- Attended the initial CDC pilot project training.
- Planned the pilot project beginning with county selection based on mortality data from the Kentucky Cancer Registry, recruited local and other state partners, and identified and developed evidence-based recruitment methods.
- Created and distributed a media toolkit promoting breast cancer screening mammograms.
- Developed a facilitation guide and distributed the guide to all USDA extension agents in the nine targeted counties. Agents incorporated community presentations to increase awareness and breast cancer screenings.
- Implemented a media campaign pilot to promote awareness of the need for screening in nine Eastern Kentucky counties with high mortality rates and low screening rates for breast cancer. This campaign included the airing of 62 radio ads and 56 TV ads. These ads reached residents in 27 counties including the nine TEAM UP counties. Expansion of the campaign will be determined after the conclusion of evaluation studies in September 2007.

3. Targeted Outreach

Though combined efforts of the Department for Medicaid Services, the Division of Women's Physical and Mental Health, and the Kings Daughter's Hospital in Ashland, a Mobile Mammography project was conducted in three of the TEAM UP counties. A mobile mammography unit was arranged to visit Martin, Magoffin and Wolfe counties due to the lack of free standing or mobile mammography facilities in these counties. A total of 68 women received screening mammograms during the visits. Due to the success of this endeavor, King's Daughters Hospital obtained grant funds to continue the mobile mammography project for another year.

During FY 2006, public education and outreach staff members continued to support efforts to recruit members of disparate populations, including Appalachian women, African American women and women who partner with other women. For the years 2000-2004, according to Kentucky Cancer Registry data, 37% of invasive breast cancers were found in the late stages among African American women compared to 30% in white women. African American women in the 40-49 age group have a higher death rate due to breast cancer (16.7%) compared to white women (10%).

Disparities exist due to race and ethnicity, educational attainment, income and rural location (far eastern portion of the state consisting of 51 counties in Appalachia), all of which limit the use of preventive screenings. Other contributing factors associated with the low number of cancer screenings among Appalachian and African American women include lack of convenience and time to schedule an appointment with their healthcare provider for a breast cancer screening; fear of the detection and diagnosis of breast cancer; and embarrassment related to the mammogram procedure. According to the 2004 Journal of Rural Health, barriers to breast cancer screenings for Appalachian and African American women in also include lack of knowledge of breast cancer risk factors and breast cancer screenings; myths and misconceptions about the etiology of breast cancer; fatalistic perspectives on breast cancer outcomes; lack of referrals from healthcare providers and mistrust of healthcare providers; culture; lack of knowledge about cancer and the importance of screenings; and lack of health insurance.

Table 2. Invasive Breast Cancers Diagnosed Through Local Health Departments in Kentucky, FY 2004-2006

Area Development Districts	FY 2004	FY 2005	FY 2006
1. Barren River	15	14	11
2. Big Sandy	23	24	21
3. Bluegrass	36	34	48
4. Buffalo Trace	3	6	7
5. Cumberland Valley	31	26	29
6. FIVCO	13	17	16
7. Gateway	7	9	9
8. Green River	6	12	10
9. Kentucky River	14	14	19
10. KIPDA	42	64	42
11. Lake Cumberland	14	23	18
12. Lincoln Trail	9	10	16
13. Northern Kentucky	12	13	17
14. Pennyrile	7	15	8
15. Purchase	16	13	13
***Non-Kentucky Residents**	1	4	2
Total	**249**	**298**	**286**

IV. Quality Assurance

Continuous quality assurance activities promote the quality of service delivery at Local Health Departments, contracted providers, mammography facilities and laboratories. The KWCSP is required to submit reports twice each year which provided feedback to the CDC regarding program monitoring of quality services. The CDC uses these program reports to generate Kentucky's Data Quality Indicator Guide (DQIG), a report of program performance on sixty-eight (68) indicators representing the important aspects of care. Eleven (11) of these indicators compose the program's core performance indicators. *Based on the results of the FY 2006 CDC report of the program's performance for the eleven (11) core performance indicators, the program met or exceeded the CDC standards for all of these indicators for quality of cancer services for the first time in the history of the program.* (Refer to Table 3.)

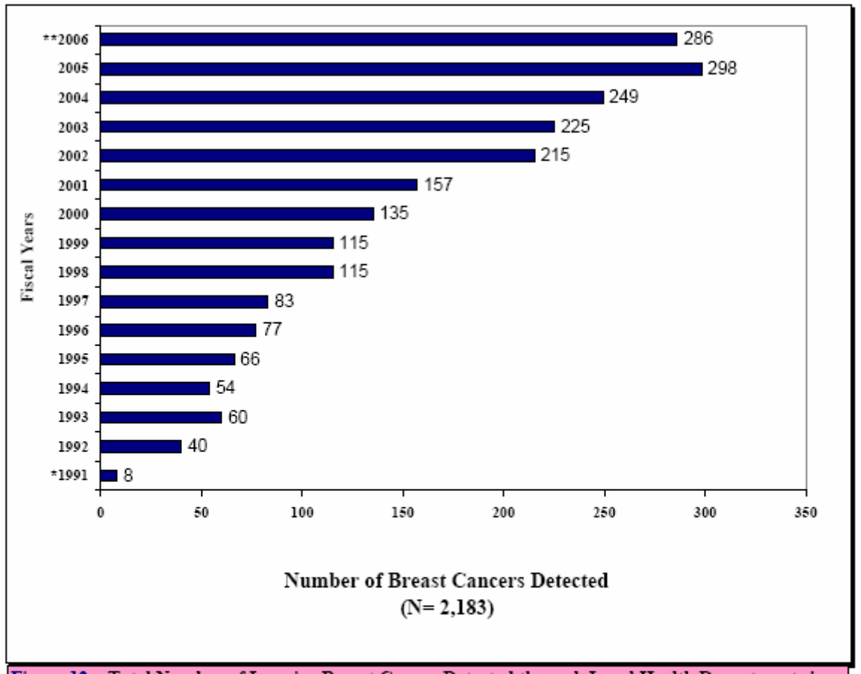


Figure 12. Total Number of Invasive Breast Cancer Detected through Local Health Departments in Kentucky, FY 1991-2006 (Source: Kentucky Women's Cancer Screening Program, Kentucky Department for Public Health, 2006).
*** Year Program Initiated.**
**** Data for FY 2006 is preliminary.**

Table 2 demonstrates the high number of invasive breast cancers diagnosed through Local Health Departments in higher population areas which include the Kentuckiana Regional Planning and Development Agency (KIPDA), Bluegrass and Cumberland Valley Area Development Districts in FY 2006. The higher number of breast cancers diagnosed in these three districts may be related to the large number of mammography screening services provided to women served by Local Health Departments in these areas.

Outreach efforts to recruit African American women to receive breast cancer screenings were increased based on an analysis of the Kentucky Cancer Registry data. More than 2,000 women were screened in FY 2006 as a result of a joint effort in Fayette and Jefferson Counties. Special emphasis was given to the African American women through the Lexington Fayette County Health Department, the Sister to Sister Project, and the Louisville and Jefferson County Partnership in Cancer Control. To address breast cancer health disparities among Hispanics, the KWCSP contracted with the University of Louisville Brown Cancer Center to support a special mobile mammography outreach initiative called the Jefferson County Partnership in Cancer Control. The goal of this initiative was to reduce barriers in breast cancer screening among women who are members of disparate populations, including immigrant women such as those among the rapidly growing Hispanic population. The KWCSP continues to improve partnerships and establish resources for the evaluation of screening outcomes for these projects.

4. Training

Training programs were provided to Local Health Department coalition coordinators and members to enhance their outreach efforts. A statewide training was provided to more than 100 community coalitions and Local Health Department staff members to encourage screenings of women who have never or rarely been screened for breast cancer and to promote outreach funding alternatives. The two day Annual Coalition training was held for 158 coalition coordinators and volunteers, Local Health Department and Kentucky Cancer Program staff members on the use of evidence based approaches to reaching never or rarely screened women, social marketing, and effective communication and outreach strategies to reach African American, Hispanic, and Appalachian women.

D. Breast and Cervical Cancer Treatment Program

On October 1, 2002, Breast and Cervical Cancer Treatment Funds became available for women who were screened for breast cancer through the KWCSP. Kentucky's Department for Medicaid Services (DMS) added coverage through special eligibility processes to enroll women who require treatment for breast or cervical cancer or precancerous conditions. Since 2002, the KWCSP has collaborated with the DMS to provide at least 1,645 women coverage benefits for treatment through the DMS Breast and Cervical Cancer Prevention and Treatment Program. Without the availability of the screening and diagnostic services and the treatment referrals, these women might not have been diagnosed or received treatment for breast or cervical cancer. (Refer to Figure 6.)

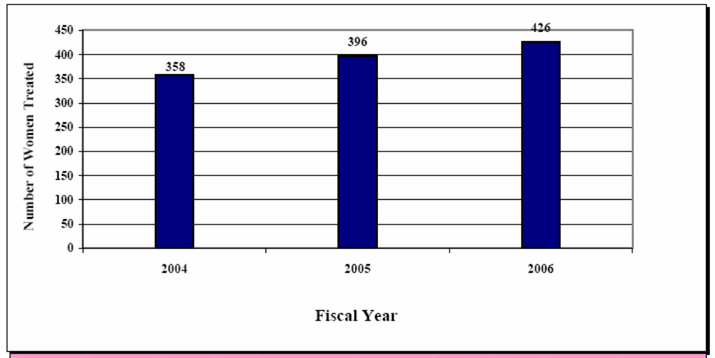


Figure 6. Number of Women Treated through the Breast and Cervical Cancer Treatment Program, FY 2004-2006 (Source: Department for Medicaid Services, 2006).

III. Clinical Services

A. Screening Services

1. Screening Mammograms Performed through Local Health Departments in Kentucky by Service Numbers

Since 1990, a total of 206,595 screening mammograms have been performed through Local Health Departments in Kentucky. During FY 2006, 17,181 screening mammograms were provided through Local Health Departments in Kentucky. (Refer to Figure 7.) Of the 17,181 screening mammograms provided through the Local Health Departments, 11,980 screening mammograms were provided to KWCSP eligible women. *The KWCSP breast cancer screening rate (20%) was higher than the federal National Breast and Cervical Cancer Early Detection Program (NBCCEDP) screening rate (19%) for other state CDC funded programs.*

2. Diagnostic Services Performed through Local Health Departments by Race

The majority of diagnostic services provided through Local Health Departments reflected racial and ethnic distribution of the state's population were to white, Non-Hispanic women (83%). The remaining number of diagnostic mammograms were divided among African Americans (10%), Hispanics (4%), and Others and Unknowns (3%), which includes Asians and American Indian women. A lower percentage (10%) of diagnostic services was performed on Non-Hispanic African American women compared to (83%) white, Non-Hispanic women. As depicted in Figure 11, 7.2% of the Kentucky's total population is Non-Hispanic, African American women, while 10% of the African American women were provided diagnostic services through the Local Health Departments as a result of effective outreach efforts to African Americans. (Refer to Figure 11.)

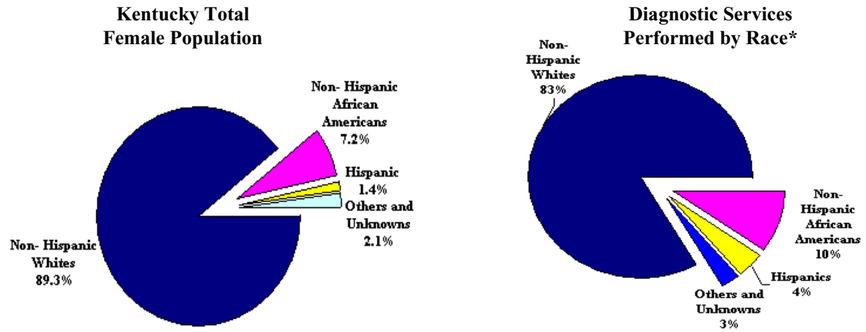


Figure 11. Percentage of Kentucky Total Female Population vs. Diagnostic Services Performed through Local Health Departments in Kentucky by Race, FY 2006 (Source: Kentucky Women's Cancer Screening Program, Kentucky Department for Public Health, 2006 & Kentucky State Data Center, 2000).
* Data for FY 2006 is preliminary.

C. Outcomes: Breast Cancers Detected through Local Health Departments in Kentucky

Between FY 1991 and FY 2006, 2,183 cases of breast cancer were detected in women who received breast cancer screening services through Local Health Departments. Figure 12 shows the number of breast cancer cases detected by year. In FY 2006, a total of 286 invasive breast cancers were detected through Local Health Departments. Figure 12 demonstrates a consistent increase in the detection of invasive breast cancers through the Local Health Departments. Data for FY 2006 is still preliminary. County-specific data is available upon request.

B. Diagnostic Services

1. Diagnostic Services Performed through Local Health Departments by Age Groups

Women who present to the Local Health Department and are enrolled in KWCSP who have abnormal findings are referred to contracted providers for diagnostic follow-up. This follow-up includes referral for surgical consultation and may include diagnostic mammography and/or echography/breast ultrasound.

In FY 2006, 11,021 diagnostic services were provided through the Local Health Departments for women who had abnormal screening mammogram results. In FY 2006, 4,132 diagnostic mammograms (unilateral and bilateral) were provided through Local Health Departments. By far, diagnostic mammograms was the most common procedure (37%) (approximately one of every three diagnostic procedures) followed by echography/breast ultrasound (33%). The remainder of diagnostic procedures included breast biopsies, cyst aspirations, fine needle aspirations and other diagnostic services.

72% percent of services performed through Local Health Departments were provided to women younger than 49 years of age. A lesser percentage of women 50 years old and older (28%) received fewer diagnostic procedures compared to women 49 years of age and younger. This difference in the percentage of diagnostic procedures is expected because older women have less dense breast tissue, which is more likely to be adequately imaged via screening mammography. For fiscal years 2004, 2005 and 2006, the percentages of diagnostic procedures provided among all age groups remained stable. (Refer to Figure 10.)

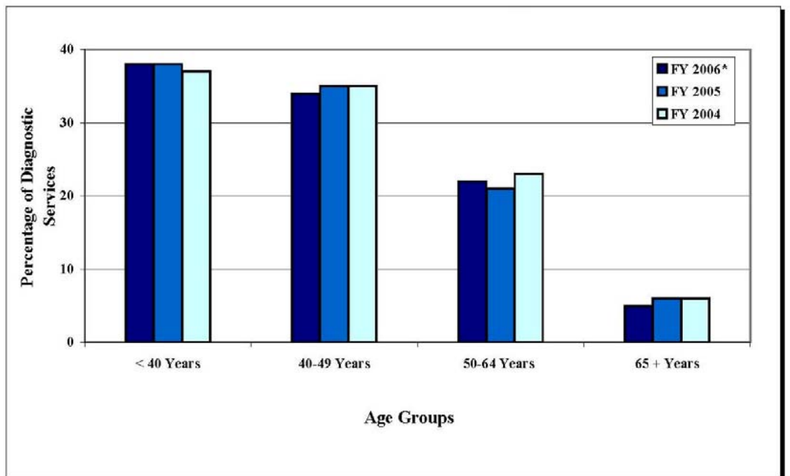


Figure 10. Percentage of Diagnostic Services Performed through Local Health Departments in Kentucky by Age Groups, FY 2004-2006 (Source: Kentucky Women's Cancer Screening Program, Kentucky Department for Public Health, 2006).
***Data for FY 2006 is preliminary.**

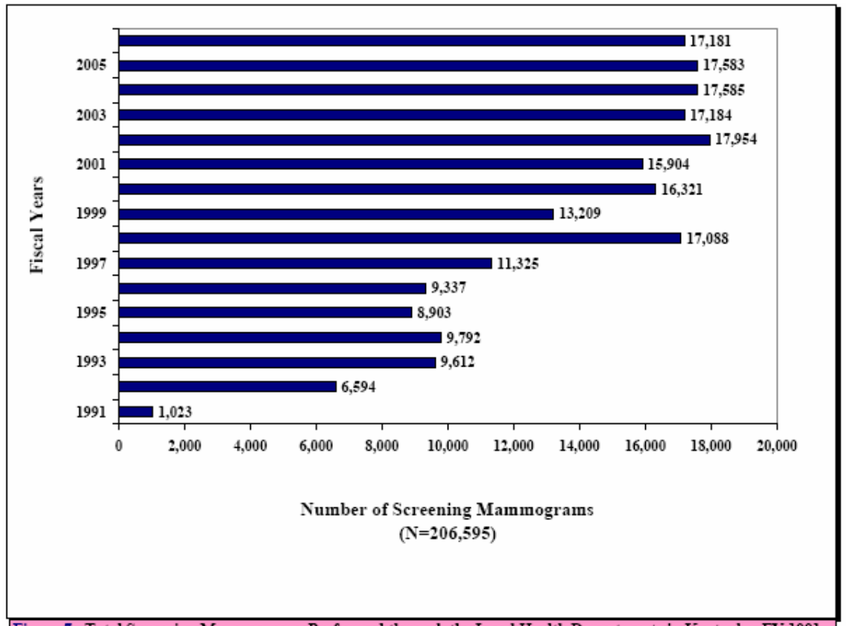
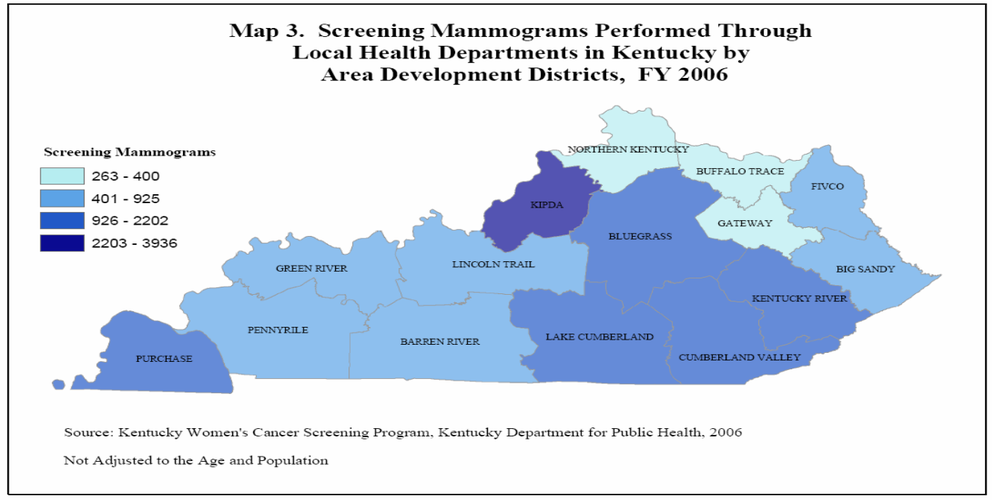


Figure 7. Total Screening Mammograms Performed through the Local Health Departments in Kentucky, FY 1991-2006 (Source: Kentucky Women's Cancer Screening Program, Kentucky Department for Public Health, 2006).
***Data for FY 2006 is preliminary.**

Figure 7 shows the total number of screening mammograms provided by all Local Health Departments in Kentucky for fiscal years 1991-2006. County-specific data is available upon request. Also, Figure 7 shows one exceptional year of screening mammography in 1998, during which additional, special promotions increased the number of screening mammograms. This promotion offered free screenings for all women over the age of 40, regardless of income and insurance status. The trend since FY 2002 indicates that the number of screening mammograms has stabilized, with slight fluctuations in actual numbers from year to year.

The greater density of breast tissue among younger women can make detection of breast cancer through clinical breast exam challenging, possibly resulting in a higher number of abnormal findings. To better prepare for this challenge, in FY 2006, the KWCSP maintained contracts with the University of Louisville and the Cumberland Valley Health Department to conduct clinical breast examination training using the Mammacare® method for Local Health Department nurses and contracted providers.

Map 3 demonstrates the large number of screening mammograms performed through Local Health Departments in areas with large urban populations that have a higher number of screening mammograms and where healthcare service providers are clustered.



2. Screening Mammograms Performed through Local Health Departments by Age Groups

The American Cancer Society and the National Cancer Institute recommend yearly screening mammograms for women 40 years old and older. The Kentucky Department for Public Health follows these recommendations for screening mammograms. In FY 2006, 97% of screening mammograms performed through Local Health Departments were for women 40 years old and older. Women ages 40-49 comprised the largest group of women who received screening services (44%). Forty-two percent (42%) of these women were 50-64 years old. Eleven percent (11%) of these women were 65 years old and older.

Throughout the FY 2004-2006, percentages of screening mammography among all age groups have remained stable. (Refer to Figure 8.) Results of several large studies indicate that screening mammograms reduce the number of deaths from breast cancer for women over 40 years old, especially for those women over 50 years old. Studies conducted to date have not shown a benefit for regular screening mammograms, or for a baseline mammogram, for women under 40 years old. Since guidelines do not recommend regular screening for women younger than 40 years old, it is expected to obtain a lower percentage of screening mammograms for women 40 years old and younger. However, women under 40 years old are provided with mammograms at Local Health Departments if they have symptoms of breast cancer or a family history of pre-menopausal breast cancer. Women 65 years old and older who are eligible for Medicare may choose to obtain screening mammography services from providers who do not have contracts with Local Health Departments. This explains the lower percentage of women 65 years old and older who received screening mammograms through Local Health Departments compared to other age groups.

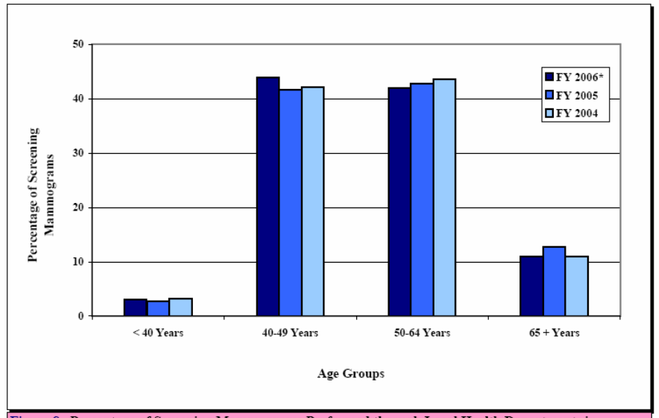


Figure 8. Percentage of Screening Mammograms Performed through Local Health Departments in Kentucky by Age Groups, FY 2004-2006 (Source: Kentucky Women's Cancer Screening Program, Kentucky Department for Public Health, 2006).
*** Data for FY 2006 is preliminary.**

3. Screening Mammograms Performed through Local Health Departments by Race

For FY 2006, the majority of screening mammograms (83%) were provided to white, non-Hispanic women. The remaining screening mammograms were divided among African Americans (14%), Hispanics (2%), and Others and Unknowns (1%), which includes Asians and American Indian women. (Refer to Figure 9.) Screening mammograms were provided to a higher proportion of African American women (14%) than are represented in the Kentucky population (7%). The higher proportion of African American women served by the KWCSP suggests that outreach efforts may have a positive effect in the promotion of breast cancer screenings among African American women. As depicted in Figure 9, 7.2% of the Kentucky's total population is Non-Hispanic, African American women, while 14% of the African American women were provided screening mammograms through the Local Health Departments as a result of effective outreach efforts to African Americans.

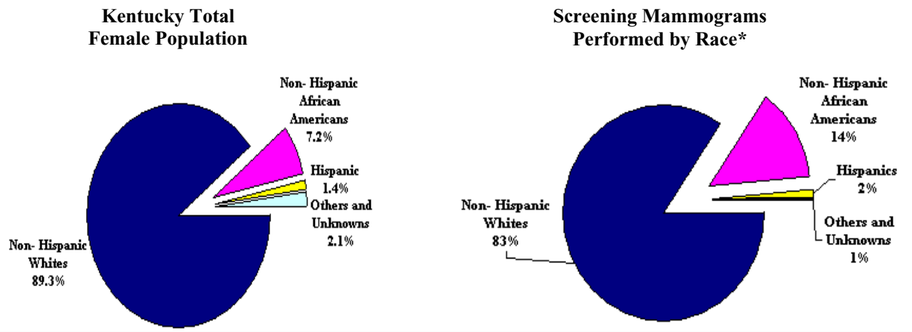


Figure 9. Percentage of Kentucky Total Female Population vs. Screening Mammograms Performed through Local Health Departments in Kentucky by Race, FY 2006 (Source: Kentucky Women's Cancer Screening Program, Kentucky Department for Public Health, 2006 & Kentucky State Data Center, 2000).
*** Data for FY 2006 is preliminary.**